CASIO

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Casio Piano Sound

CPS-60

Digital Piano
Piano Digital

OPERATION MANUAL 2
MANUAL DE OPERACION 32

英西

CASIO

Casio Piano Sound CPS-60

Digital Piano

Thank you and congratulations on your purchase of the CASIO CPS-60. In order to enjoy the features and functions of the CPS-60 to their fullest, be sure to carefully read this manual and follow the instructions contained herein.

Features

30 Preset Tones — The CPS-60 lets you choose from 30 different built-in tones provided by an advanced PCM sound source.

76-Key Keyboard with Touch Response — From the lightest pianissimo to the most thunderous fortissimo, the CPS-60's "Touch Response" keyboard responds to even the most subtle changes in keyboard dynamics. And a full 76-key keyboard gives you expanded freedom of musical expression.

Reverb Effect — The CPS-60 is provided with reverb effect to add wide ranging ambiance to tones.

64 Rhythms — All the rhythms you could ever need, from pops and rock to classic.

Auto-Accompaniment (Multi-Accompaniment System) — Provide a harmonic pattern with an auto-rhythm that you select.

Memory Function — The memory function lets you "record" notes as you play them on the keyboard.

MIDI Compatibility — The CPS-60 features MIDI — the Musical Instrument Digital Interface. This industry-standard interface lets you connect your keyboard with other MIDI instruments, sound sources and devices for synchronized performance.

NOTICE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC WARNING

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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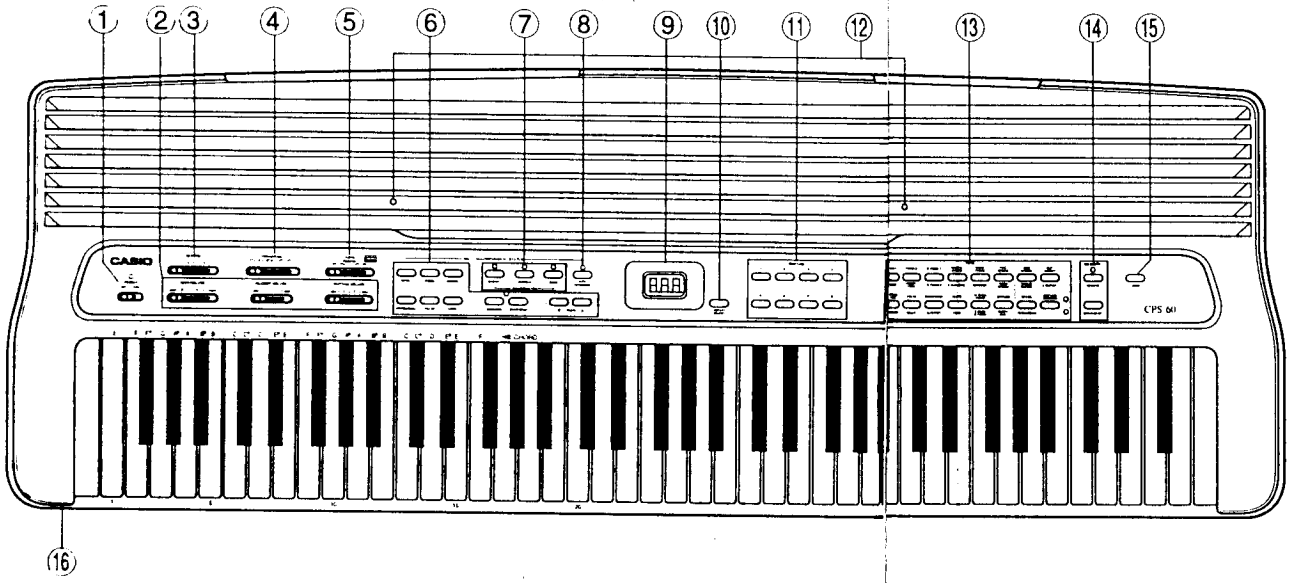


1 **POWER switch**
Switches the unit ON and OFF. Indicator above this switch lights when power is ON. This indicator will lose its brightness when battery power weakens.

2 **VOLUME sliders (→ page 10)**
Control main volume, accompaniment volume and rhythm volume separately.

3 **REVERB controller (→ page 10)**
Controls strength of the reverb effect.

4 **TRANSPOSE control (→ page 14)**
Slide left or right to transpose key of performance (raises/lowers overall tuning). This control makes it easy to tune to instruments tuned to different keys when playing in ensemble, and is convenient for adjusting key to match the range of vocalists. Key can be raised or lowered one full octave, in half-step increments.

5 **CHORD selector (→ page 17)**
Used to select the auto-accompaniment function.

⑥ **Musical Controller buttons (→ page 21)**
Used to control the accompaniment patterns in various ways.

⑦ **ORCHESTRATION buttons (→ page 22)**

⑧ **AUTO HARMONIZE button (→ page 22)**

⑨ **3-digit display**
Displays operational settings and levels.

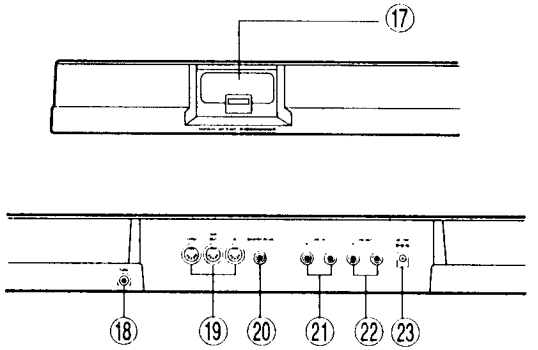
⑩ **DISPLAY SELECT button (→ page 13)**

⑪ **RHYTHM selectors (→ page 15)**
Used to select one of the auto-rhythms.

⑫ **Score stand holes (→ page 7)**
For inserting the score stand which comes with this piano.

⑬ **TONE selectors (→ page 12)**
Used to select one of the preset tones.

<Rear panel>



⑭ **MEMORY buttons (→ page 23)**
Used to "record" your keyboard performance.

⑮ **DEMO button (→ page 11)**
Used to start and stop built-in demonstration tunes.

⑯ **Headphone jack**
For connection of optional headphones. Output from the speaker is automatically cut when headphones are connected.

⑰ **Battery compartment (→ page 8)**

⑱ **Tuning control**
Adjusts the pitch of the entire keyboard within ±30 cents, for tuning to other instruments. Standard pitch is A_4 = 442Hz.

Terminals

⑲ **MIDI terminals (IN/OUT/THRU) (→ page 25)**
Used to connect to other MIDI instruments and devices.

⑳ **DAMPER PEDAL jack (→ page 7)**
For connection of sustain pedal (SP-2) which comes with this piano.

㉑ **LINE IN terminals (L/R)**
For connection of other instruments, audio equipment, etc. Note that the input sound cannot be controlled by the VOLUME sliders of this piano.

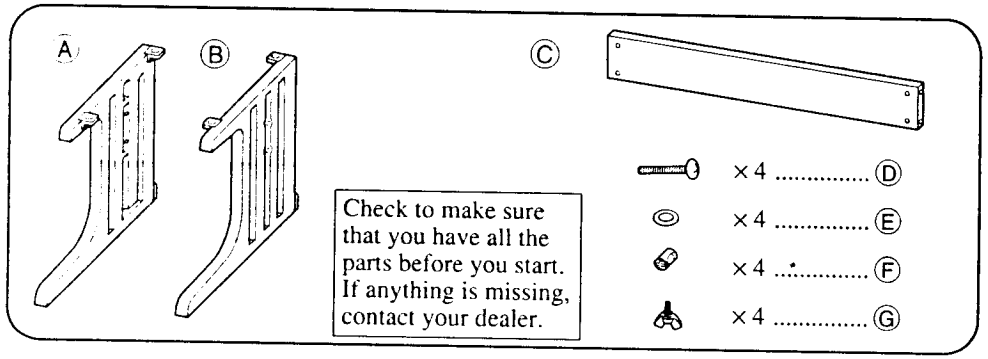
㉒ **LINE OUT terminals (L/R)**
For connection to keyboard amplifiers, external speakers, audio equipments, etc.

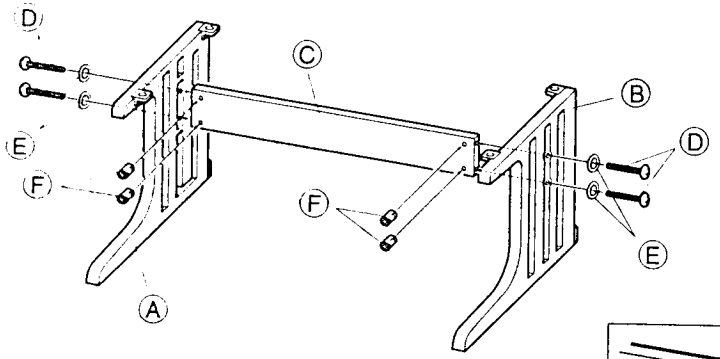
㉓ **DC 12V input jack (→ page 9)**
For connection of an AC adaptor (CASIO's AD-12).

Assembly Instructions

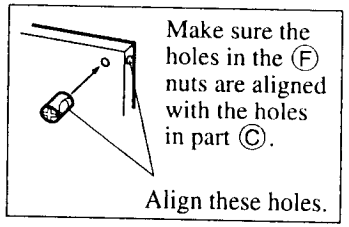
1 Assemble the CS-25P stand.

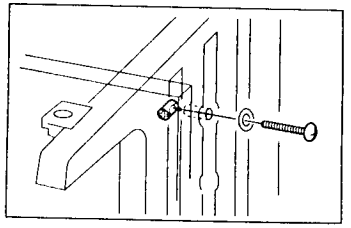
- In addition to the parts that come with this unit, you will also need a large Phillips head (+) screwdriver.
- Assemble the stand in an area where the floor is level.





- Insert the four Ⓕ nuts into part Ⓒ, making sure the holes are aligned correctly.
- Put the four Ⓔ washers on the four Ⓓ bolts, and use the Ⓓ bolts to secure parts Ⓐ and Ⓑ to part Ⓒ.

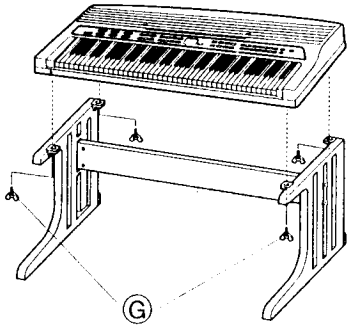




IMPORTANT

Take sufficient care when screwing the Ⓓ bolts into the Ⓕ nuts to make sure both parts are properly aligned. Forcing the parts together can strip the bolt and make proper installation impossible.

2 Install the piano onto the stand.

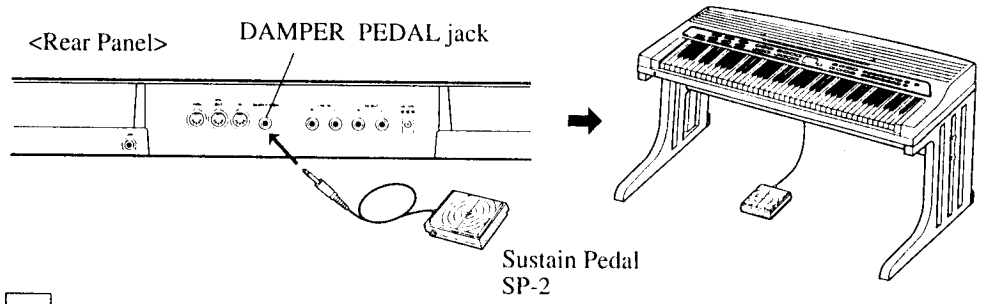


Be careful to avoid pinching your hands between the keyboard and stand.

- Be sure to use the Ⓖ butterfly bolts to securely anchor the piano to protect against it falling off the stand.

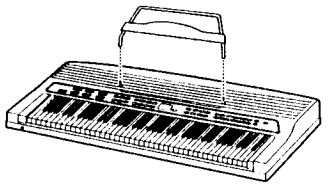
3 Connecting the pedal

Connect the accessory sustain pedal (SP-2) to the DAMPER PEDAL jack as illustrated below.



4 Install the music stand.

Insert the two ends of the music stand into the holes of the keyboard as illustrated below.



IMPORTANT

- Do not place the keyboard/stand on a surface that is unstable or not level.
- Do not place heavy objects such as audio equipment on top of the keyboard. Never allow small children to climb on the keyboard.

Power Supply

You can power your keyboard with 6 D batteries or standard AC power.

Installing the batteries

This keyboard can be powered by 6 D size (SUM-1/R20P) manganese dry cell batteries. Make sure that the POWER switch is set to the OFF position when installing batteries.

1. Open the battery compartment cover on the back of the unit.
2. Load new batteries taking care that the plus (+) and minus (–) poles are facing in the correct directions.

- Standard battery life is approximately 4 hours.

Notes

- Weakened batteries will result in lower volume or poor tonal quality. The power indicator lamp will gradually lose its brightness when battery power weakens. At this time, change batteries or shift to the alternate power source.
- If battery power drops below a certain level, the quality of the tone produced deteriorates, a totally different tone may sound, or the demo tune or auto rhythm may become abnormal. Should any of these symptoms occur, replace batteries as soon as possible.

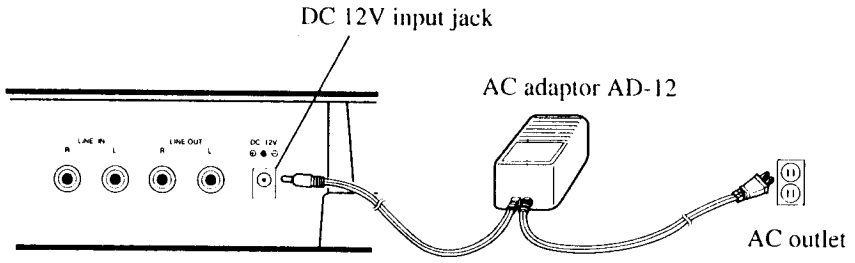
PRECAUTIONS

Incorrectly using batteries can cause them to leak or burst, and may damage your unit. Note the following precautions:

- *Be sure that the plus (+) and minus (–) poles are facing in the correct directions.*
- *Do not mix battery types.*
- *Do not mix new batteries with old ones.*
- *Never leave dead batteries in the battery compartment.*
- *Remove batteries when not using the unit for extended periods.*
- *Never try to recharge the batteries that are specified for the power supply of this unit.*
- *Do not expose batteries to direct heat, let them become shorted or try to take them apart.*
  (If a battery leaks, clean out the battery compartment of the unit immediately, taking care to avoid letting the battery fluid come into direct contact with your skin.)

Using AC power

An AC adaptor (AD-12) is required when using household current. Use only a genuine CASIO adaptor with the same voltage rating (100, 120, 220 or 240V) as the power supply in your area to prevent damage to internal components. Be sure to turn the power of the unit off before you connect the adaptor to the unit. Plug the AC adaptor into the AC outlet and the cord into the unit. This will automatically cut off the battery power supply.



IMPORTANT

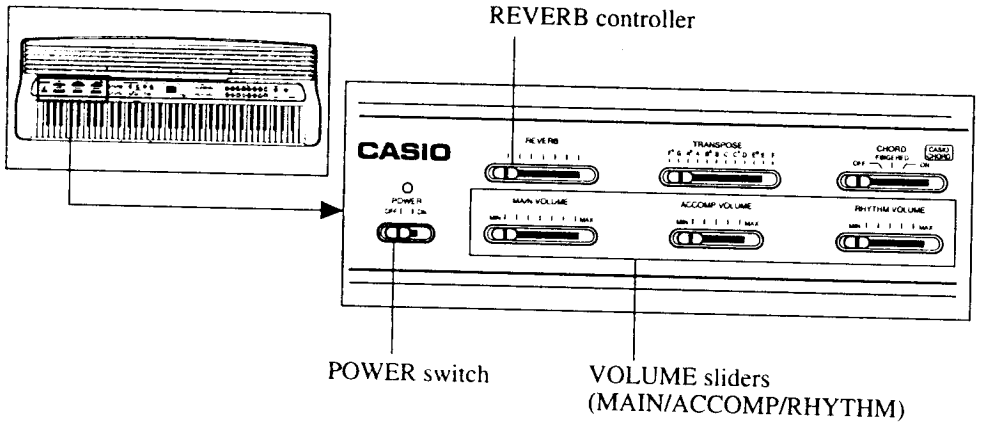
- The adaptor may become warm when it is being used. This is normal and does not indicate any problem.
- Be sure to unplug the adaptor from the power source when you are not using the unit.
- Whenever connecting or disconnecting the adaptor, be sure that the power of the unit is switched off.
- Never use a power supply that does not match that specified for the unit. Doing so can damage the adaptor or your unit.

Auto power off function

Power is automatically cut off approximately 6 minutes after the last operation of the unit. Power supply can be restored by switching power OFF and then ON again. The Auto power off function is inoperative when playing back the demonstration tunes (power is not turned OFF, even though you don't touch the keyboard).

To cancel the Auto power off function

To cancel the Auto Power Off function, turn the power switch ON while holding down the PIANO 3 tone selector. The unit will remain ON until you turn OFF manually.



Getting started

1. Set the POWER switch to ON.
2. Adjust the volume level using the MAIN VOLUME slider.
3. Select one of the 64 preset tones (see "Tones", page 12).
4. Now, start playing.

Volume sliders

MAIN VOLUME slider — Adjusts the overall volume of the unit.

ACCOMP VOLUME slider — Adjusts the volume of the accompaniment pattern.

RHYTHM VOLUME slider — Adjusts the volume of the auto-rhythm.

Reverb effect

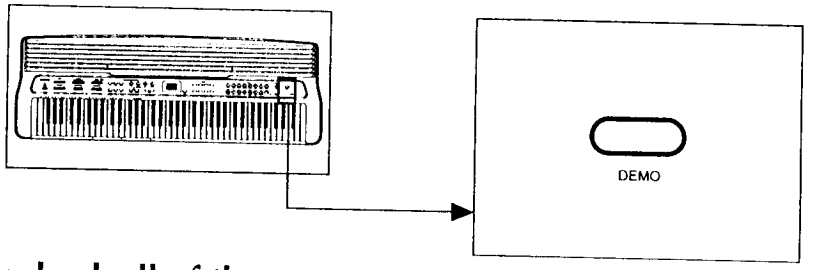
Reverb effect makes tones longer after they are played, which gives the feeling they are being played in a large hall. This piano has REVERB controller, which you can adjust the strength of the reverb effect.

- If you want to play without reverb, slide the REVERB controller to MIN position.

Tuning control

You can adjust the pitch of the entire keyboard within ±30 cents using the tuning control on the rear panel. This allows easy tuning with other instruments.

This unit features 4 preset demonstration tune which have been carefully programmed to showcase all the features and benefits of this piano. You can specify individual tunes for playback, or you can play back all 4 tunes straight through.



To playback all of the tunes

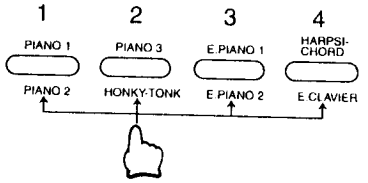
1. Set the POWER switch to ON.
2. Press the DEMO button.

- Playback starts from the first demonstration tune, and continues with the other tunes in sequence. After the 4th tune ends, playback starts again from the first tune.

3. To stop playback, press the DEMO button again.

To playback a specific tune

1. Set the POWER switch to ON.
2. Hold down one of the tone selectors illustrated below.



3. While holding down the tone selector, press the DEMO button.

- Playback starts from the beginning of the tune you select. When the end of the tune is reached, playback starts again from the beginning of the selected tune.

4. To stop playback, press the DEMO button again.

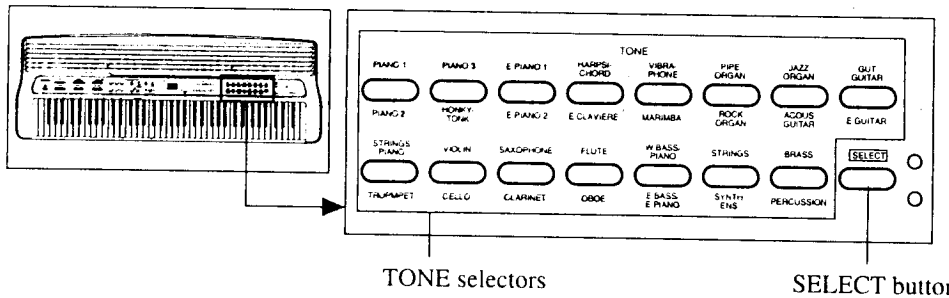
Notes

- You can play along with the playback of the demonstration tunes with PIANO 1 tone. Note that you cannot change the preset tone while playing back the demonstration tune.
- Key transpose setting (page 14) does not affect the playback of demonstration tunes.
- All the sliders except MAIN VOLUME, DEMO button and START/STOP button are inoperable while playing back the demonstration tunes.

Tones

Selecting a tone

You can choose from 30 different tones. To select a tone, follow the steps below.



1. Set the POWER switch to ON. PIANO 1 tone is automatically selected when you turn on this piano.

2. Specify either the upper or lower row of preset tones by pressing the SELECT button. The upper or lower indicator lights to show the active row.

3. Press one of the TONE selectors to choose a preset tone.

Note

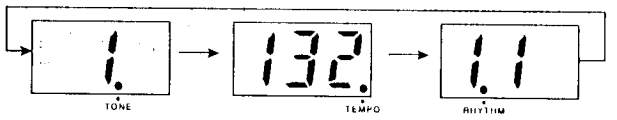
When you select a preset tone, the display shows the number of the selected tone. Note the following;

Selected tone	Display	Selected tone	Display
PIANO 1	1.	PIANO 2	16.
PIANO 3	2.	HONKY-TONK	17.
E.PIANO 1 (Electric Piano)	3.	E.PIANO 2 (Electric Piano 2)	18.
HARPSICHORD	4.	E.CLAVIER (Electric Clavier)	19.
VIBRAPHONE	5.	MARIMBA	20.
PIPE ORGAN	6.	ROCK ORGAN	21.
JAZZ ORGAN	7.	ACOUS.GUITAR (Acoustic Guitar)	22.
GUT GUITAR	8.	E.GUITAR (Electric Guitar)	23.
STRINGS PIANO	9.	TRUMPET	24.
VIOLIN	10.	CELLO	25.
SAXOPHONE	11.	CLARINET	26.
FLUTE	12.	OBOE	27.
W.BASS/PIANO (Wood bass/Piano)	13.	E.BASS/E.PIANO	
STRINGS	14.	(Electric Bass/Electric Piano)	28.
BRASS	15.	SYNTH-ENS	
		(Synthesizer Ensemble)	29.
		PERCUSSION	30.

To change the display

The 3-digit display on the front panel of this piano actually displays 3 different values: TONE number, RHYTHM number and TEMPO value. You can change the display by pressing the DISPLAY SELECT button located to the right of the 3-digit display.

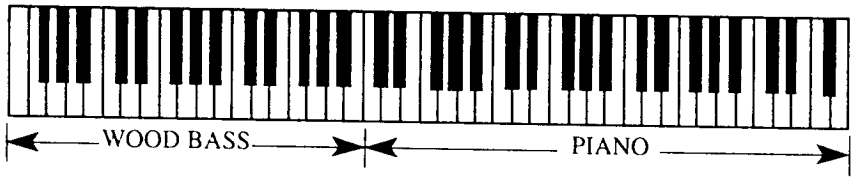
When the DISPLAY SELECT button is pressed, display changes as shown below.



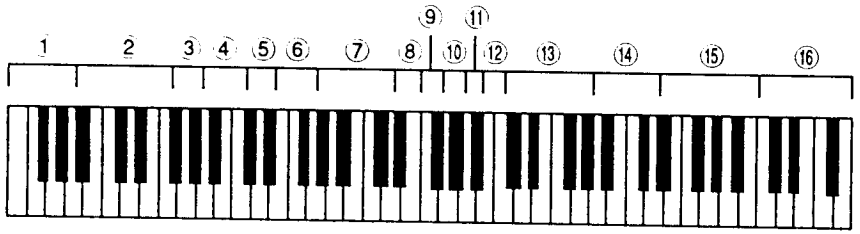
Keyboard split tones

Some of the preset tones split the keyboard and assign two or more sounds. With such a preset tone, the sound produced depends on what position of the keyboard you play.
For example, W.BASS/PIANO puts WOOD BASS on the left and PIANO on the right of the keyboard.

W.BASS/PIANO



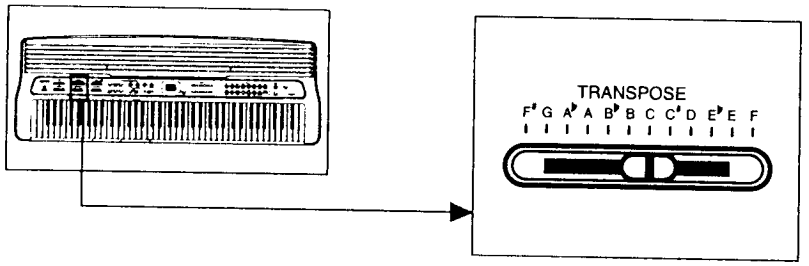
PERCUSSION



①	Bass drum	⑥	Crash cymbal	⑪	Floor tom
②	Snare drum	⑦	Ride cymbal	⑫	Cow bell
③	Rim shot	⑧	Hi tom	⑬	Timbales
④	Closed hi-hat	⑨	Mid tom	⑭	Maracas
⑤	Open hi-hat	⑩	Low tom	⑮	Claves
				⑯	Clap hands

Key transpose

The key of the entire keyboard can be transposed in half-tone steps between F# and F by simply sliding the TRANSPOSE control right and left. The central position sets the keyboard to the key of C.



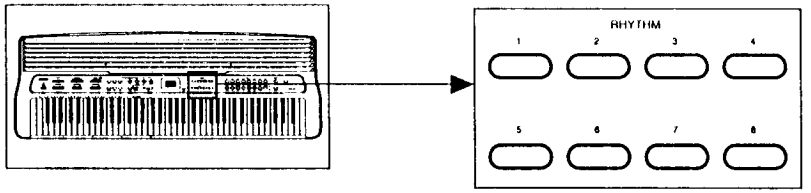
Note
When you choose a keyboard split tone (page 13), the keyboard split point(s) of the sounds moves according to the key transpose setting.

Auto-rhythms

Selecting an auto-rhythm

This piano features 64 auto-rhythms to choose from. Each rhythm has a 2-digit number. To select an auto-rhythm, find its rhythm number in the 64 RHYTHM list printed on the score stand, and enter the number using the RHYTHM selectors.

- "POPS 1" rhythm (No.1.1) is selected automatically whenever you switch the power of the piano ON.



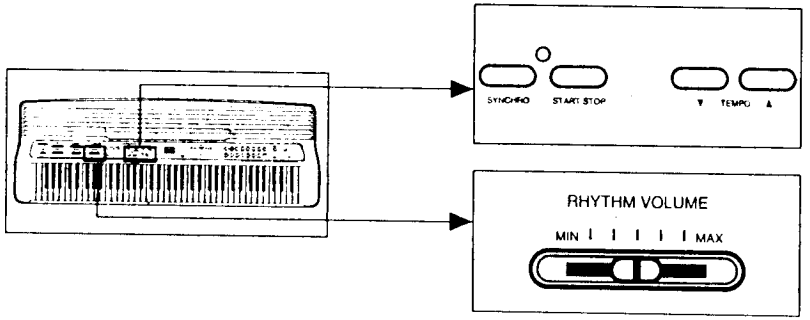
To select an auto-rhythm, follow the steps below.

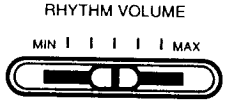
1. Set the POWER switch to the ON position.	POWER OFF ON	1. RHYTHM TONE TEMPO
2. Enter the rhythm's two-digit number by pressing the RHYTHM selectors. For example, to select 16 BEAT (No.4.5), press [4] [5].	4 + 5	4.5 RHYTHM TONE TEMPO
3. To change the rhythm, repeat Step 2 above.	—	—

Note
You can also change the selected rhythm by pressing only one RHYTHM selector. Note the following:

Selected rhythm	→	Press	→	Newly selected rhythm
No.5.1		1		No.1.1
No.1.1		2		No.1.2
No.1.2		5		No.2.5

Playing an auto-rhythm



1. After selecting an auto-rhythm, press the START/STOP button to start the rhythm.	
2. Adjust the tempo using the TEMPO control buttons. Each press of ▲ speeds up the tempo, while pressing ▼ slows it down. The 3-digit display shows the tempo of the rhythm. • The tempo of the auto-rhythm can be adjusted between 40 and 256 beats per minute.	
3. You can adjust the volume of the rhythm by using the RHYTHM VOLUME slider. • Note that the auto-rhythm does not sound when RHYTHM VOLUME slider is set to MIN.	
4. Press the START/STOP button again to stop auto-rhythm play.	

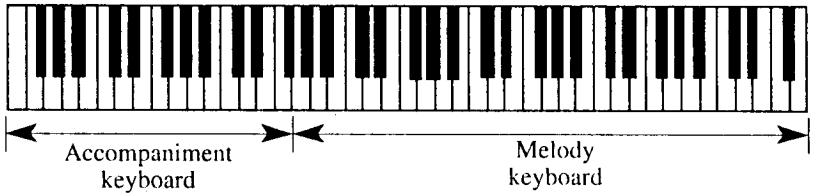
• You can use the MUSICAL CONTROLLER buttons to start an auto-rhythm with intro pattern, inserting fill-ins to the rhythm, etc. Please refer to page 21 "Using MUSICAL CONTROLLER buttons" for details.

Auto-accompaniment

This unit features 64 accompaniment patterns that let you add full accompaniments to your performances automatically.
You can select from two types of auto-accompaniment — simplified fingering chord play (CASIO CHORD ON) or standard fingering (FINGERED).

Accompaniment keyboard

When you set the CHORD selector to FINGERED or CASIO CHORD ON, the keys of the lower 2 octave of the keyboard are the accompaniment keys and the rest of the keyboard is the melody section.



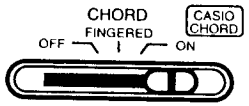
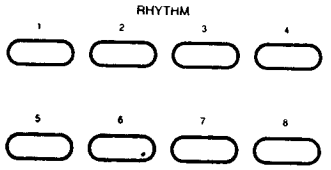
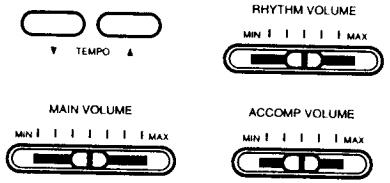
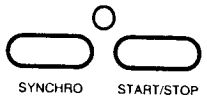
Playing an accompaniment using CASIO CHORD

The CASIO CHORD system lets you easily play the four main types of chords. Playing of the chords is simplified as shown in the chart below.

Keys	Chord Type	Example
Pressing **one** accompaniment key	Major chord	**C** (C Major Chord)
Pressing **two** accompaniment keys	Minor chord	**Cm** (C Minor Chord)
Pressing **three** accompaniment keys	Seventh chord	**C7** (C Seventh Chord)
Pressing **four** accompaniment keys	Minor seventh chord	**Cm7** (C Minor Seventh Chord)

Note
The bottom note that you play determines the name of the chord. For example, if the bottom note is C, the keyboard plays a C chord.

Follow these steps to play the CASIO CHORD auto-accompaniment.

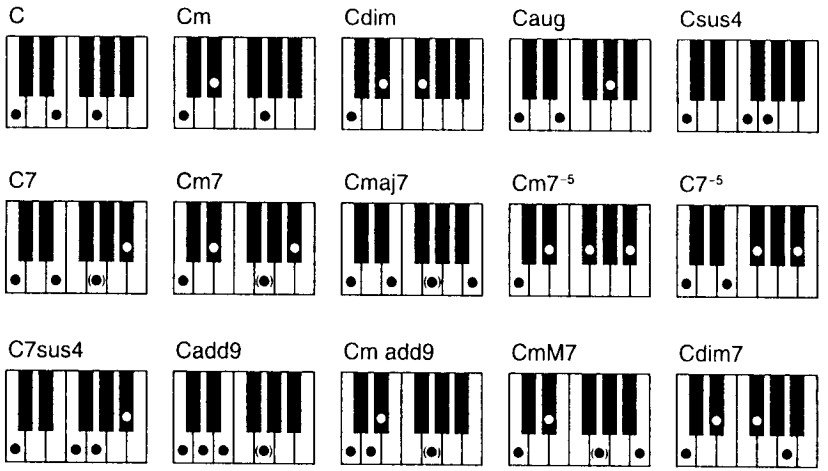
1. Set the CHORD selector to the ON position.	
2. Select one of the auto-rhythms. (refer to "Auto-rhythms" on page 15)	
3. Start the auto-rhythm by pressing the START/STOP button.	
4. Press one to four accompaniment keys. The accompaniment automatically plays.	
5. Adjust TEMPO ▲ / ▼, MAIN VOLUME slider, RHYTHM VOLUME slider and ACCOMP VOLUME slider.	
6. Press the START/STOP button to stop the auto-accompaniment.	

Note
You can also use introductions, fill-ins and ending patterns in your accompaniment performance. See "Using the MUSICAL CONTROLLER buttons" on page 21.

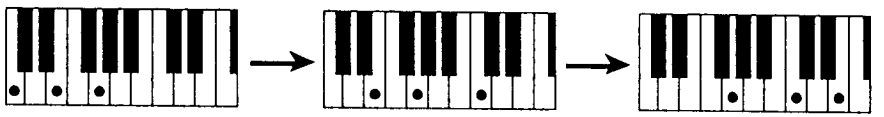
Playing an accompaniment using standard fingering

The standard fingering (FINGERED) mode lets you play a wider variety of chords. You can start an accompaniment pattern by pressing down either three or four of the proper accompaniment keys.

This unit is capable of recognizing 15 different chords. The following shows the fingerings of the recognized chords with a root of C. Note that you can omit the fifth note (which are within parentheses in the illustrations below) to produce "7", "m7", "maj7", "mM7", "add9" and "m add9" chords.

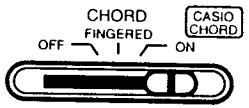
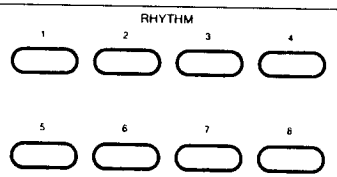
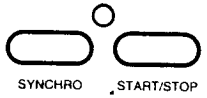
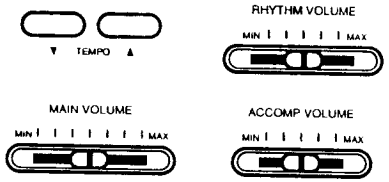
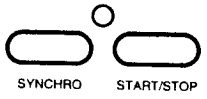


Notes
Each of the above examples shows only one of the possible fingerings for each chord. Note that you can play a chord by pressing its notes in any combination. For examle, each of the following fingerings produces the same C chord.



- See the "List of fingered chord" on pages 61 and 62 for infomation on the fingering of chords with all the roots.

Follow these steps to play the standard fingering auto-accompaniment.

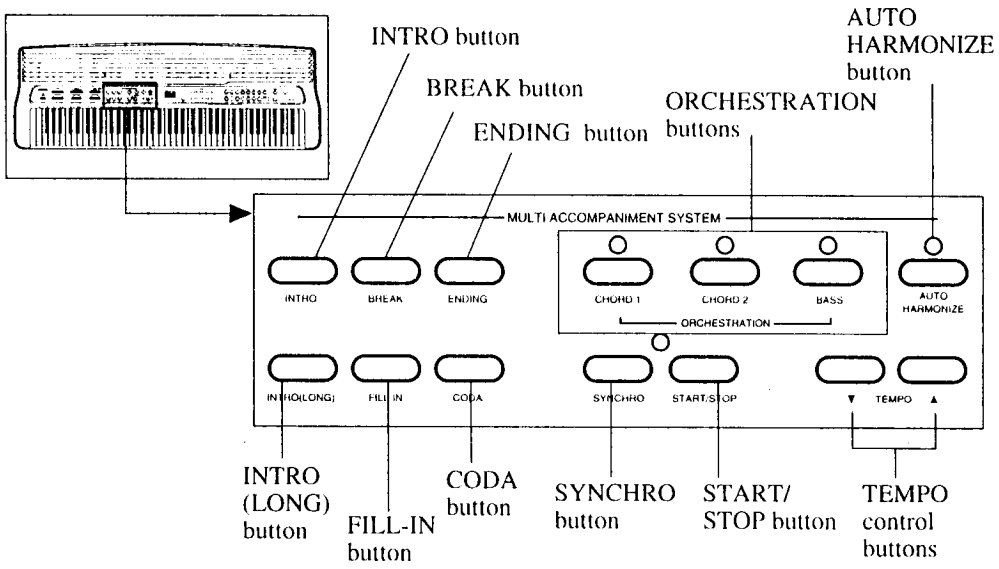
1. Set the CHORD selector to the FINGERED position.	
2. Select one of the auto-rhythms. (refer to "Auto-rhythms" on page 15)	
3. Start the auto-rhythm by pressing the START/STOP button.	
4. Press the accompaniment keys for the desired chord.	
5. Adjust TEMPO ▲ / ▼, MAIN VOLUME slider, RHYTHM VOLUME slider and ACCOMP VOLUME slider.	
6. Press the START/STOP button to stop the auto-accompaniment.	

Note

You can also use introductions, fill-ins and ending patterns in your accompaniment performance. See "Using the MUSICAL CONTROLLER buttons" on page 21.

Using the MUSICAL CONTROLLER buttons

The ten MUSICAL CONTROLLER buttons give you control over the accompaniment patterns. When the CHORD selector is in the FINGERED or ON position, you can control all of the accompaniment patterns. When it is in the OFF position, you can control the rhythm pattern only.



- **INTRO button**
  This button inserts a light 1-measure introduction before starting the normal accompaniment pattern.

- **INTRO (LONG) button**
  This button inserts a 4- to 5-measure introduction before starting the normal accompaniment pattern. The chord progression used in the intro leads into the progression used for the accompaniment. Even if you do not specify an accompaniment keyboard chord when you press this button for an intro, the unit automatically bases the intro on the last chord you played (or on Cmaj if you have switched the unit ON and have not yet played a chord).

- **FILL-IN button**
  When you press this button during play of an accompaniment, a 1- to 2-measure fill-in pattern is inserted.

- **BREAK button**
  When you press this button during play of an accompaniment, a 1- to 2-measure patten is inserted, which stops at the beginning of a subsequent pattern.

- **ENDING button**
  When you press this button in place of the START/STOP button to end the accompaniment play, a 1- to 3-measure ending pattern is inserted before accompaniment play is stopped.

- **CODA button**
  When you press this button in place of the START/STOP button to end the accompaniment play, a 4- to 5-measure long ending pattern is inserted before accompaniment play is stopped. The progression of chords used in the ending pattern are based on the chord that is being played when you press this button.

- **SYNCHRO button**
  Press this button, and the unit stands by waiting for you to play a note on the accompaniment keyboard. The selected rhythm pattern begins as soon as you press a key (or more than three correct keys in case you selected FINGERED mode) on the accompaniment keyboard.

Using the ORCHESTRATION buttons

The auto-accompaniment patterns produced by this unit consist of 4 different elements; rhythm track, bass line, chord 1 pattern and chord 2 pattern. The ORCHESTRATION buttons switch the sound of these elements (except the rhythm track) ON and OFF. For example, if you want only a rhythm track and bass line for your accompaniment, you can turn off the CHORD 1 and CHORD 2 elements.

ORCHESTRATION buttons:

CHORD 1 button	switches chord 1 sound on and off.
CHORD 2 button	switches chord 2 sound on and off.
BASS button	switches bass sound on and off.

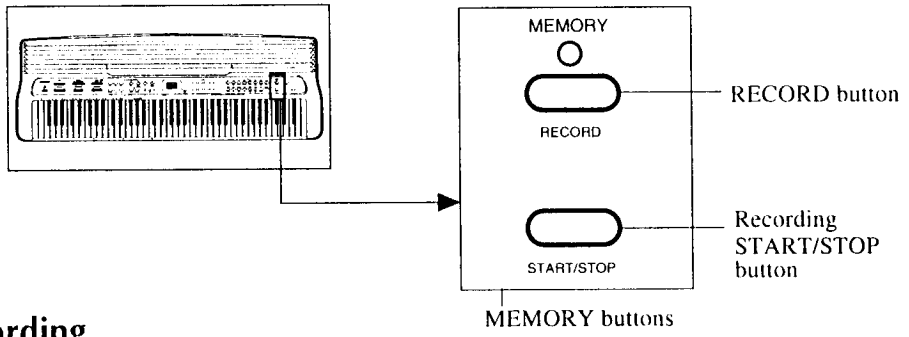
Using the AUTO HARMONIZE button

If this button is depressed during play of an accompaniment pattern, the chord selected on the accompaniment keyboard is automatically harmonized with notes played on the melody keyboard.

- The melody keyboard becomes 4-note polyphonic when you activate the AUTO HARMONIZE.

Performance Memory Function

The performance memory function lets you "record" notes as you play them on the keyboard. Up to 2,400 notes can be stored in memory for playback.



Recording

1. Start an auto-rhythm and adjust the tempo of the recording.
2. Press the RECORD button to enter the recording standby mode. The light above the RECORD button flashes.
3. Set the CHORD selector to FINGERED or ON if you want to use auto-accompaniment in your recording. If not, set this switch to OFF.
4. Select the auto-rhythm you like.
   - If you don't want an auto-rhythm in your recording (or if you want to start an auto-rhythm during recording), press the Musical Controller START/STOP button here.
   - If you want to start an auto-rhythm with intro pattern, press the INTRO (or INTRO LONG) button here.
   - If you want to start an auto-rhythm using synchro start, press the SYNCHRO button here.
5. Press the recording START/STOP button to start recording. Recording starts after one measure of beat count.
6. Play the keyboard as you like.
7. Press the recording START/STOP button again to stop recording.

Notes on recording

- You can record changes in the following operations as well as keyboard play during recording.
  Changing preset tones
  Changing auto-rhythms.
  Starting or stopping a rhythm track.
  Starting a rhythm track using an INTRO (or INTRO LONG) pattern.

Inserting the FILL-IN (or BREAK) patterns of the rhythms.
Ending the rhythm track with an ENDING (or CODA) pattern.
ORCHESTRATION buttons setting (ON or OFF)
AUTO HARMONIZE button setting (ON or OFF)

- Memory capacity is approximately 2,400 notes. Operations such as changes in rhythms and tones are counted as a half-note.
- Recording automatically ends when you exceed the memory capacity.

Playing back memory contents

1. Press the recording START/STOP button to play back your performance. The light above the RECORD button lights and playback starts.
2. Press the recording START/STOP button again to stop playback.

- You can adjust the tempo of playback using TEMPO control buttons.

Memory Backup Battery

This piano comes with a lithium battery that supplies the power required to retain performance memory data when power is turned off. The life of this battery is about 5 years, and so it must be replaced periodically. Note that performance memory data will be lost whenever you switch power off while the battery is dead.

IMPORTANT
The backup battery must be replaced by an authorized CASIO service representative. Contact your local CASIO Service Center once every 5 years to arrange to have the battery replaced.

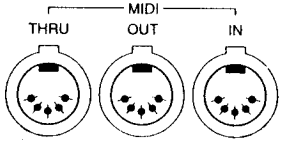
WARNING
- The lithium battery used for memory backup presents fire, explosion, and severe burn hazard. Be sure to contact an authorized CASIO Service Center to have the battery replaced.
- CASIO Computer Co., Ltd. assumes no responsibility for any damage or loss caused by deletion of performance memory data as a result of malfunction, repairs, or battery replacement.

MIDI

"MIDI" stands for "Musical Instrument Digital Interface". Practically speaking, it lets you connect this keyboard to other MIDI-equipped musical instruments and devices, such as synthesizers, drum machines, sequencers, and even personal computers.

MIDI terminal functions

MIDI IN — Receives external MIDI messages.
MIDI OUT — Sends MIDI messages to external devices.
MIDI THRU — Receives external MIDI messages through MIDI IN and outputs them without modification.



Communicable functions

The following functions can be sent and received through the CPS-60's MIDI terminals. For details on the MIDI functions, see the "MIDI Implementation Chart" inside the back cover of this manual.

Note Number, Velocity
Keyboard pitch ON/OFF, Touch Response data.
- Note number messages are sent/received regardless of the position of the CHORD selector. However, it is recommendable to set this selector to OFF position when you use the MIDI function of this piano.

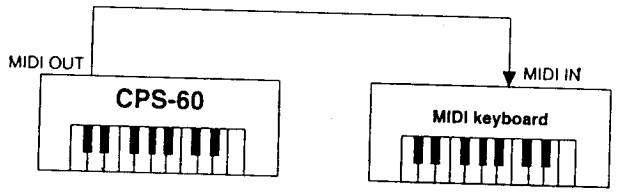
Program Change
Each preset tone corresponds to the program change number 0~29 as listed below.

Tone	Prog. No.	Tone	Prog. No.	Tone	Prog. No.
PIANO 1	0	SAXOPHONE	10	ROCK ORGAN	20
PIANO 3	1	FLUTE	11	ACOUS.GUITAR	21
E.PIANO 1	2	W.BASS/PIANO	12	E.GUITAR	22
HARPSICHORD	3	STRINGS	13	TRUMPET	23
VIBRAPHONE	4	BRASS	14	CELLO	24
PIPE ORGAN	5	PIANO 2	15	CLARINET	25
JAZZ ORGAN	6	HONKY-TONK	16	OBOE	26
GUT GUITAR	7	E.PIANO 2	17	E.BASS/E.PIANO	27
STRINGS PIANO	8	E.CLAVIER	18	SYNTH-ENS	28
VIOLIN	9	MARIMBA	19	PERCUSSION	29

Sustain pedal ON/OFF
Sustain pedal ON/OFF data can be sent when you connect a sustain pedal to the DAMPER PEDAL jack of the CPS-60.

Notes
- Soft pedal ON/OFF message can also be received, though it cannot be sent from the CPS-60.

<<Connection example>>
By connecting MIDI OUT terminal of the CPS-60 to MIDI IN terminal of another MIDI keyboard, the MIDI keyboard plays the same note as you play on the CPS-60. The result is, the sounds of both keyboards can be played in ensemble to make a "thick" voice or totally new sound.



Setting the MIDI channel

In order to communicate with other MIDI devices, the MIDI channel numbers of both units must match. The MIDI channel can be set between channel 1 and channel 16. Follow the steps below to set the MIDI channel of the CPS-60.

1. Switch the CPS-60 power OFF.
2. Hold down the PIANO 1 tone selector and turn the power back ON.
3. While still holding down the PIANO 1 tone selector, press TEMPO control buttons ▲ or ▼ to set the MIDI channel. The display will show the MIDI channel.
4. Release the tone selector to exit MIDI channel setting.

Notes
- The MIDI channel is automatically set to "1" when the power is turned ON.
- To cancel the Auto Power OFF function in the MIDI mode, use the PIANO 3 tone selector instead of the PIANO 1 tone selector in procedure 2.
- The same MIDI channel is applied to both transmission and reception of MIDI data.

External Connections

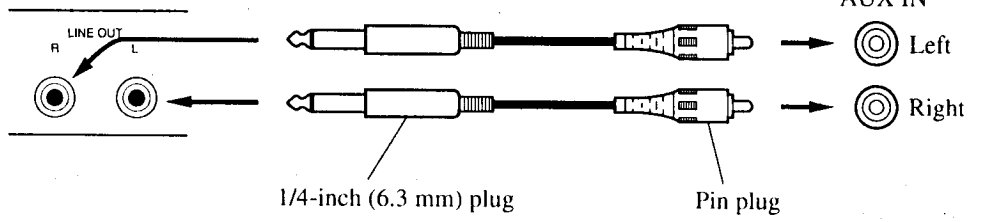
IMPORTANT
- Before you connect the CPS-60 to any other device, be sure to first switch off the power of the CPS-60 and the other device.
- When turning the CPS-60's power ON or OFF after having made connections, please set the volume controllers on both the CPS-60 and the other device to "minimum". Also please be sure to read the owner's manuals of the equipment to be connected.

LINE OUT (output) terminals (Left, Right)
Used to connect to audio equipment or keyboard amplifiers, allowing you to enjoy playing at more impressive volumes. Note that the connecting cord you use depends on the type of jack you are connecting to.

<<Connection example>>

Amplifier's input jacks (usually labeled "AUX IN")

CPS-60 (Rear panel)

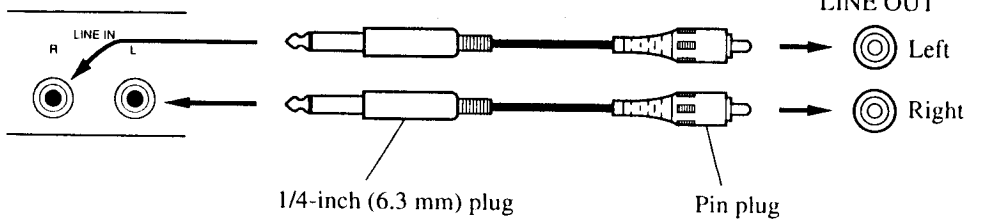


LINE IN (input) terminals (Left, Right)
Used to connect to other electronic musical instruments, tape recorders, etc. Allows output of signals from other instruments and devices through the CPS-60's built-in speakers. Note that volume levels cannot be altered with the CPS-60's volume control.

<<Connection example>>

Tape recorder's output jacks

CPS-60 (Rear panel)



Troubleshooting

Symptom	Possible cause	Remedy
No sound when keyboard keys are pressed.	Volume control set to MIN.	Change volume control setting.
	Headphones connected to keyboard.	Disconnect headphones.
Keyboard out of tune.	Transpose setting is not "C."	Set transpose to "C" (page 14).
	Tuning control is off.	Adjust the tuning control (page 10).
No rhythm.	Main and rhythm volume turned down.	Turn up main and rhythm volume.
No accompaniment.	Main and accompaniment volume turned down.	Turn up main and accompaniment volume.
Cannot play back demonstration tunes.	Volume control set to MIN.	Change volume control setting.
	Headphones connected to keyboard.	Disconnect headphones.
Occasional interference.	Wall outlet used to power keyboard is located too close to outlet being used for a refrigerator, washing machine, or other electrical appliance.	Use a power outlet as far away as possible from appliance thought to be causing interference.

Care of Your Piano

Avoid heat, humidity or direct sunlight.

Do not overexpose the unit to direct sunlight, or place near an air conditioner, or in any extremely hot place.

Take care not to drop the unit and avoid strong impact.

Strong impact may cause malfunctions. When carrying or transporting the unit, protect the keyboard and switches with soft cloth or other material.

Keep the unit free of liquids, dust, etc.

Do not allow foreign matter to get between the keys, especially metallic objects such as hairpins, sewing needles or coins. Also, do not let the unit get wet.

Never attempt to modify any parts of the unit.

The unit is a precision instrument, made of electronic parts. Any modification of, or tampering with inner parts may cause malfunction.

Do not use lacquer, thinner or similar chemicals for cleaning.

Clean the keyboard with a soft cloth dampened in a weak solution of water and a neutral detergent. (Soak the cloth in the solution and squeeze until it is almost dry.)

Specifications

Model: CPS-60
Keyboard: 76 keys, with initial touch
Polyphonic: max. 12 notes
Tones: 30
Auto-rhythms: 64

Auto-accompaniment:

Casio Chord ON/FINGERED

Musical Controller

Effects: INTRO, INTRO(LONG), FILL-IN, BREAK, ENDING, CODA

ORCHESTRATION (CHORD 1, CHORD 2, BASS), AUTO HARMONIZE

Memory: real-time memory (memory capacity: approx. 2,400 notes)

Built-in tunes: 4 tunes

Terminals:
- LINE OUT terminals (L/R): Output impedance; 2.2kΩ, Output voltage; 1.5V (RMS) MAX
- LINE IN terminals (L/R): Input impedance; 47kΩ, Sensitivity; 200mV
- DAMPER PEDAL jack
- Headphone jack
- MIDI IN/OUT/THRU terminals
- DC 12V jack

Control:
- Transpose ($F^{\#}$~C~F: half-note increments)
- Tuning control (A_4 = 442Hz ±30 cents)
- Volume control (Main/Accompaniment/Rhythm)
- Reverb control

Speakers: 14 cm × 2 (output: 5W + 5W)

Power supply: 2-way AC/DC power source;
- AC: 100, 120, 220 or 240V (± 10V), 50/60 Hz, with optional AC adaptor AD-12
- DC: 6 D size manganese dry batteries.
  Battery life: approx. 4 hours

Power consumption: 18W

Dimensions: 1224(W) × 409(D) × 95(H) mm

48 3/16"(W) × 16 1/8"(D) × 3 3/4"(H)

Dimensions with stand:

1224(W) × 500(D) × 767(H) mm

48 3/16"(W) × 19 11/16"(D) × 30 3/16"(H)

Weight: 12.4kg (27.3lbs)

[18.9kg (41.7lbs) with stand]

Accessories: Stand (CS-25P), Sustain pedal (SP-2), Dust cover, Score stand

** Designs and specifications are subject to change without notice.*